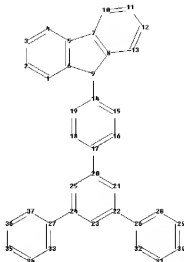
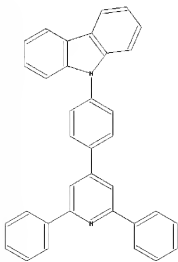


=> file reg

FILE 'REGISTRY' ENTERED AT 12:28:41 ON 29 MAY 2008



ring nodes :

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23
24 25 26 27 28 29 30 31 32 33 34 35 36 37

chain bonds :

9-14 17-20 22-26 24-27

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-9 7-8 7-10 8-9 8-13 10-11 11-12 12-13
14-15 14-19 15-16 16-17 17-18 18-19 20-21 20-25 21-22 22-23 23-24 24-25 26-28 26-32
27-33 27-37 28-29 29-30 30-31 31-32 33-34 34-35 35-36 36-37

exact/norm bonds :

5-7 6-9 8-9 9-14

exact bonds :

17-20 22-26 24-27

normalized bonds :

1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-10 8-13 10-11 11-12 12-13 14-15 14-19
15-16 16-17 17-18 18-19 20-21 20-25 21-22 22-23 23-24 24-25 26-28 26-32 27-33 27-37
28-29 29-30 30-31 31-32 33-34 34-35 35-36 36-37

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom
11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:Atom 20:Atom
21:Atom
22:Atom 23:Atom 24:Atom 25:Atom 26:Atom 27:Atom 28:Atom 29:Atom 30:Atom 31:Atom
32:Atom
33:Atom 34:Atom 35:Atom 36:Atom 37:Atom

L1 STRUCTURE UPLOADED

=> s 11 sss sam

L2 0 SEA SSS SAM L1

=> s 11 sss ful

L3 4 SEA SSS FUL L1

=> file hcaplus uspatfull

FILE 'HCAPLUS' ENTERED AT 12:30:04 ON 29 MAY 2008

FILE 'USPATFULL' ENTERED AT 12:30:04 ON 29 MAY 2008

=> s 13

FILE 'HCAPLUS'

L4 7 L3

FILE 'USPATFULL'

L5 6 L3

TOTAL FOR ALL FILES

L6 13 L3

L4 ANSWER 1 OF 7 HCAPLUS COPYRIGHT 2008 ACS on STN

AN 2006:558335 HCAPLUS <<LOGINID::20080529>>

DN 145:53073

TI Organic compound, charge-transporting material, and organic
electroluminescent element

IN Yabe, Masayoshi; Sato, Hideki; Takeuchi, Masako; Fugono, Masayo; Iida,
Koichiro

PA Pioneer Corporation, Japan; Mitsubishi Chemical Corporation

SO PCT Int. Appl., 143 pp.

CODEN: PIXXD2

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2006062062	A1	20060615	WO 2005-JP22298	20051205
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,				

KG, KZ, MD, RU, TJ, TM

JP 2006188493	A	20060720	JP 2005-350623	20051205
EP 1820801	A1	20070822	EP 2005-811601	20051205

R: DE

CN 101076528	A	20071121	CN 2005-80042418	20051205
KR 2007085974	A	20070827	KR 2007-713039	20070608

PRA1 JP 2004-358592 A 20041210

WO 2005-JP22298 W 20051205

OS MARPAT 145:53073

AB An organic compound and a charge-transporting material which each combines excellent hole-transporting properties with excellent electron-transporting properties and has excellent long-term resistance to elec. oxidation/reduction and a high triplet excitation level; and an organic electroluminescent element employing the organic compound. The element has a high luminescent efficiency, high operation stability, and a long life. The organic compound has per mol. two or more partial structures represented by the following formula I, where Cz is carbazoyl, Z is a direct bond or any connecting group. The nitrogen atoms present in each mol. are not conjugated with each other, except for the nitrogen atoms present in the same ring B1. Only one pyridine ring is present per mol. The two or more Q's present per mol. each represents a direct bond connected to G in the formula II, where ring B1 is a 6-membered aromatic heterocycle having n nitrogen atom(s) as a heteroatom, provided that n is an integer of 1-3. When G is connected to Q, it is a direct bond or any connecting group which each is connected to Q. When G is not connected to Q, it is an aromatic hydrocarbon group. G is bonded to any of the carbon atoms located in the ortho and para positions to a nitrogen atom of the ring B1. Symbol m is an integer of 3-5.

RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

IT 890148-75-1P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(organic compound, charge-transporting material, and organic electroluminescent element)

L4 ANSWER 2 OF 7 HCAPLUS COPYRIGHT 2008 ACS ON STN

AN 2005:1130983 HCAPLUS <<LOGINID::20080529>>

DN 143:376246

TI Organic electroluminescent device having two electroluminescent layers through electron barrier layer

IN Iwakuma, Toshihiro; Matsuura, Masahide; Yamamoto, Hiroshi; Kawamura, Hisayuki; Hosokawa, Chishio

PA Idemitsu Kosan Co., Ltd., Japan

SO PCT Int. Appl., 56 pp.

CODEN: PIXXD2

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2005099313	A1	20051020	WO 2005-JP5397	20050324

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM,

SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
 RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
 AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
 EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT,
 RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML,
 MR, NE, SN, TD, TG

CN 1906976 A 20070131 CN 2005-80001435 20050324
 EP 1753268 A1 20070214 EP 2005-721411 20050324
 R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
 IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR
 US 20070188083 A1 20070816 US 2006-567903 20060824
 PRAI JP 2004-109651 A 20040402
 WO 2005-JP5397 W 20050324

AB The invention relates to an organic electroluminescent device comprising a
 pair of electrodes and at least two organic luminescent layers held between
 the electrodes, wherein the two organic luminescent layers are disposed
 through an electron barrier layer, and the two organic luminescent layers are
 both made of electron transport light-emitting material.

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

IT 2085-33-8, Alq3 7429-90-5, Aluminum, uses 7439-93-2, Lithium, uses
 123847-85-8 139092-78-7 146162-54-1 150405-69-9, TAZ 172285-83-5
 209980-53-0 279672-58-1 364765-18-4 607739-95-7 607740-04-5
 665005-15-2 800395-01-1
 RL: DEV (Device component use); USES (Uses)
 (organic electroluminescent device having two electroluminescent layers
 through electron barrier layer)

L4 ANSWER 3 OF 7 HCAPLUS COPYRIGHT 2008 ACS on STN
 AN 2004:634243 HCAPLUS <<LOGINID::20080529>>
 DN 141:182077
 TI Organic electroluminescence device showing high emission efficiency and
 extended service life for full color display
 IN Arakane, Takashi; Iwakuma, Toshihiro; Hosokawa, Chishio
 PA Idemitsu Kosan Co., Ltd., Japan
 SO PCT Int. Appl., 55 pp.
 CODEN: PIXXD2
 DT Patent
 LA Japanese
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2004066685	A1	20040805	WO 2004-JP236	20040115
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ				
EP 1589789	A1	20051026	EP 2004-702427	20040115
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
CN 1762182	A	20060419	CN 2004-80007699	20040115
US 20060180806	A1	20060817	US 2005-542629	20050718
PRAI JP 2003-16505	A	20030124		
WO 2004-JP236	W	20040115		

AB An organic electroluminescence device has at least a hole-transport layer and
 a light-emitting layer made of a phosphorescent light-emitting material

and a host material between a cathode and an anode. The triplet energy of the hole-transport material of the hole-transport layer is 2.52-3.70 eV. The hole mobility is 10-6 cm²/Vs at an elec. field strength of 0.1-0.6 MV/cm. Thus an organic electroluminescence device using phosphorescence emission, exhibiting a high emission efficiency, and having a long life is provided.

IT 607740-04-5 607740-05-6 607740-09-0

RL: DEV (Device component use); USES (Uses)

(host material; organic electroluminescence device showing high emission efficiency and extended service life)

L4 ANSWER 4 OF 7 HCAPLUS COPYRIGHT 2008 ACS on STN

AN 2004:473163 HCAPLUS <<LOGINID::20080529>>

DN 141:30891

TI Organic electroluminescent device and display

IN Fukuda, Mitsuhiro; Kita, Hiroshi; Yamada, Taketoshi

PA Konica Minolta Holdings, Inc., Japan

SO U.S. Pat. Appl. Publ., 37 pp.

CODEN: USXXCO

DT Patent

LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI US 20040110031	A1	20040610	US 2003-718360	20031120
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US 7270893	B2	20070918		
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JP 2004178895	A	20040624	JP 2002-342192	20021126
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PRAI JP 2002-342192	A	20021126		
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OS MARPAT 141:30891

AB Disclosed is an organic electroluminescent device comprising a component

layer including a light emission layer, wherein the light emission layer contains a phosphorescent compound, and the component layer contains a compound represented by A-(Z)_n, [A = (un)substituted aromatic ring residue; n = 3-6 integer; and Z = monovalent organic group represented by -L-Cz, [L = chemical bond and divalent linking group; Cz = (un)substituted carbazole residue], provided that A-(Z)_n does not have an n-fold axis of symmetry].

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

IT 699119-36-3P 699119-40-9P 699119-44-3P 699119-49-8P

699119-54-5P 699119-58-9P 699119-61-4P 699119-65-8P 699119-69-2P

699119-73-8P 699119-77-2P 699119-81-8P 699119-86-3P 699119-96-5P

699120-00-8P

RL: DEV (Device component use); SPN (Synthetic preparation); PREP

(Preparation); USES (Uses)

(organic electroluminescent device and display having light emitting layer containing phosphorescent substance)

L4 ANSWER 5 OF 7 HCAPLUS COPYRIGHT 2008 ACS on STN

AN 2004:334022 HCAPLUS <<LOGINID::20080529>>

DN 140:365380

TI Organic electroluminescent device

IN Arakane, Takashi; Iwakuma, Toshihiro; Hosokawa, Chishio

PA Idemitsu Kosan Co., Ltd., Japan

SO PCT Int. Appl., 81 pp.

CODEN: PIXXD2

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2004034751	A1	20040422	WO 2003-JP12598	20031001
W: CN, JP, KR, US				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR				
EP 1551206	A1	20050706	EP 2003-751304	20031001
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, SK				
CN 1703937	A	20051130	CN 2003-80101284	20031001
US 20060257684	A1	20061116	US 2005-529238	20050325
PRA1 JP 2002-296024	A	20021009		
WO 2003-JP12598	W	20031001		

AB An organic electroluminescent device having, between a cathode and an anode, a light-emitting layer which is made of at least a phosphorescent material and a host material, has an electron injection layer arranged between the light-emitting layer and the cathode and having a junction with the light-emitting layer. The light-emitting layer has electron transport properties and the ionization potential of the host material is 5.9 eV or less. The energy gap of an electron transport material in the electron injection layer is smaller than that of the host material in the light-emitting layer, or the triplet energy of the electron transport material in the electron injection layer is smaller than that of the host material in the light-emitting layer. The organic electroluminescent device uses light emission of phosphorescence and has high luminous efficiency.

RE.CNT 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

IT 607740-04-5 607740-09-0

RL: DEV (Device component use); USES (Uses)
(electroluminescent layer host; organic electroluminescent device with phosphorescent guest in electroluminescent layer)

L4 ANSWER 6 OF 7 HCAPLUS COPYRIGHT 2008 ACS on STN

AN 2003:777920 HCAPLUS <<LOGINID::20080529>>

DN 139:299015

TI Carbazole derivative for organic electroluminescent devices and organic electroluminescent devices

IN Iwakuma, Toshihiro; Yamamoto, Hiroshi; Hironaka, Yoshio; Ikeda, Hidetsugu; Hosokawa, Chishio; Tomita, Seiji; Arakane, Takashi

PA Idemitsu Kosan Co., Ltd., Japan

SO PCT Int. Appl., 68 pp.

CODEN: PLXXD2

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2003080760	A1	20031002	WO 2003-JP3329	20030319
W: CN, IN, JP, KR				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR				
EP 1489155	A1	20041222	EP 2003-712758	20030319
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, CY, TR, BG, CZ, EE, HU, SK				

CN 1701111	A	20051123	CN 2003-806689	20030319
US 20040086745	A1	20040506	US 2003-393988	20030324
IN 2004CN02074	A	20060303	IN 2004-CN2074	20040917
US 20050249976	A1	20051110	US 2005-150342	20050613
PRAI JP 2002-81234	A	20020322		
JP 2002-299810	A	20021015		
WO 2003-JP3329	W	20030319		
US 2003-393988	B1	20030324		

AB The invention refers to a material for blue electroluminescent devices having the structure (Cz)_nA or Cz(A)_n [Cz = (un)substituted arylcarbazoly or carbazoylyl alkylene; A = M_pL_qM'_r; M, M' = (un)substituted C2-40 heteroarom. rings; L = single bond, (un)substituted C6-30 aryl or arylene, C5-30 cycloalkylene, photorefractive C2-30 heteroarom.; p, r = 0 - 2; q = 1 - 2; p + r > 1].

RE.CNT 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

IT 607739-86-6P 607739-88-8P 607739-89-9P 607739-91-3P 607739-95-7P
 607739-97-9P 607739-99-1P 607740-01-2P 607740-03-4P
 607740-04-5P 607740-05-6P 607740-06-7P 607740-09-0P
 607740-11-4P 607740-13-6P

RL: DEV (Device component use); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
 (carbazole derivative for organic electroluminescent devices and organic electroluminescent devices)

L4 ANSWER 7 OF 7 HCAPLUS COPYRIGHT 2008 ACS ON STN

AN 2000:405859 HCAPLUS <<LOGINID::20080529>>

DN 133:51178

TI Amino compound, manufacture of the compound, and its use in electrophotographic photoconductor and electroluminescent device

IN Fujino, Yasumitsu; Ueda, Hideaki; Furukawa, Keiichi

PA Minolta Camera Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 32 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2000169448	A	20000620	JP 1998-346820	19981207
PRAI JP 1998-346820		19981207		

OS MARPAT 133:51178

AB The amino compound is represented as A(Ar2NR1R2)_n [I; A = pyridine-based group Q1-Q3; Ar1 = (substituted) arylene; Ar2, Ar3 = (substituted) aryl; n = 1-3; R1, R2 = alkyl, aralkyl, (substituted) aryl, (substituted) aromatic heterocycle; R1 and R2 may form a ring]. The compound is manufactured by reaction of A(Ar1X)_n (A, Ar1, and n are the same as I; X = halogen) and HNR1R2 (R1, R2 are the same as I). Alternatively, the compound is manufactured by reacting XAr5COH [Ar5 = (substituted) arylene; X = halogen] and Ar8COMe [Ar8 = (substituted) aryl], heating the resulting pyrylium salt in aqueous NH3 or ammonium salt solution, and reacting the resulting 2,4,6-triarylpyridine halide and HNR1R2. Similar processes for preparation of the compound are also claimed. The compound is used in an electroluminescent device and used as a pos. hole-transporting agent in an electrophotog. photoconductor.

IT 276246-34-5 276246-35-6 276246-36-7 276246-37-8
 276246-38-9 276246-39-0 276246-40-3 276246-41-4 276246-42-5

276246-43-6 276246-44-7 276246-45-8 276246-46-9 276246-47-0
276246-48-1 276246-49-2 276246-50-5 276246-51-6 276246-52-7
276246-53-8 276246-54-9 276247-62-2

RL: DEV (Device component use); USES (Uses)
(amino compound for electroluminescent device and pos. hole-transporting
agent in electrophotog. photoconductor)

L5 ANSWER 1 OF 6 USPATFULL on STN

AN 2007:215131 USPATFULL <<LOGINID::20080529>>

TI Organic electroluminescence element having two electroluminescent layers
through electron barrier layer

IN Iwakuma, Toshihiro, Chiba, JAPAN
Matsuura, Masahide, Chiba, JAPAN
Yamamoto, Hiroshi, Chiba, JAPAN
Kawamura, Hisayuki, Chiba, JAPAN
Hosokawa, Chishio, Chiba, JAPAN

PA Idemitsu Kosan Co., Ltd., Tokyo, JAPAN (non-U.S. corporation)

PI US 2007188083 A1 20070816

AI US 2005-567903 A1 20050324 (10)

WO 2005-JP5397 20050324
20060824 PCT 371 date

PRAI JP 2004-109651 20040402

DT Utility

FS APPLICATION

LREP OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C., 1940 DUKE STREET,
ALEXANDRIA, VA, 22314, US

CLMN Number of Claims: 15

ECL Exemplary Claim: 1

DRWN 2 Drawing Page(s)

LN.CNT 1571

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB An organic electroluminescent device including a pair of electrodes, and
at least two organic emitting layers held between the pair of
electrodes, (1) two organic emitting layers being arranged with an
electron barrier layer interposed therebetween, (2) the two organic
emitting layers both including an electron-transporting emitting
material.

L5 ANSWER 2 OF 6 USPATFULL on STN

AN 2006:301327 USPATFULL <<LOGINID::20080529>>

TI Organic electroluminescent device

IN Arakane, Takashi, Chiba, JAPAN
Iwakuma, Toshihiro, Chiba, JAPAN
Hosokawa, Chishio, Chiba, JAPAN

PA Idemitsu Kosan Co., Ltd., Tokyo, JAPAN (non-U.S. corporation)

PI US 2006257684 A1 20061116

AI US 2003-529238 A1 20031001 (10)

WO 2003-JP12598 20031001
20050325 PCT 371 date

PRAI JP 2002-296024 20021009

DT Utility

FS APPLICATION

LREP PARKHURST & WENDEL, L.L.P., 1421 PRINCE STREET, SUITE 210, ALEXANDRIA,
VA, 22314-2805, US

CLMN Number of Claims: 15

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 2215

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB An organic electroluminescence device comprising a cathode, an anode and at least one layer comprising a phosphorescent light emitting material and a host material which is sandwiched between the cathode and the anode and further comprising an electron injecting layer which is adhered to the light emitting layer and is capable of transporting electrons, wherein an ionization potential of the host material is 5.9 eV or smaller, and wherein an energy gap of the electron transporting material in the electron injecting layer is smaller than that of the host material in the light emitting layer or wherein a triplet energy of the electron transporting material in the electron injecting layer is smaller than that of the host material in the light emitting layer. It emits phosphorescent light with enhanced efficiency because it comprises a light emitting layer and an electron injecting layer both satisfying specified condition and employs a light emitting layer capable of electron transporting.

L5 ANSWER 3 OF 6 USPATFULL on STN

AN 2006:212656 USPATFULL <<LOGINID::20080529>>

TI Organic electroluminescence device

IN Arakane, Takashi, Chiba, JAPAN

Iwakuma, Toshihiro, Chiba, JAPAN

Hosokawa, Chishio, Chiba, JAPAN

PI US 2006180806 A1 20060817

AI US 2004-542629 A1 20040115 (10)

WO 2004-JP236 20040115

20050718 PCT 371 date

PRAI JP 2003-16505 20030124

DT Utility

FS APPLICATION

LREP STEPTOE & JOHNSON LLP, 1330 CONNECTICUT AVENUE, N.W., WASHINGTON, DC, 20036, US

CLMN Number of Claims: 10

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 1254

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB An organic electroluminescence device comprising a cathode, an anode and, sandwiched between the cathode and the anode, at least a hole transporting layer and a light emitting layer containing a phosphorescent light emitting material and a host material, wherein the hole transporting layer comprises a hole transporting material having a triplet energy of 2.52 to 3.70 eV and a hole mobility of 10.sup.-6 cm.sup.2/Vs or higher as measured at a field intensity of 0.1 to 0.6 MV/cm. Thus, the organic electroluminescence device utilizing a phosphorescent light emission according to the present invention can exhibit a favorable current efficiency and a long lifetime.

L5 ANSWER 4 OF 6 USPATFULL on STN

AN 2005:286712 USPATFULL <<LOGINID::20080529>>

TI Material for organic electroluminescence devices and organic electroluminescence device using the material

IN Iwakuma, Toshihiro, Sodegaura-shi, JAPAN
Yamamoto, Hiroshi, Sodegaura-shi, JAPAN
Hironaka, Yoshio, Sodegaura-shi, JAPAN
Ikeda, Hidetsugu, Sodegaura-shi, JAPAN
Hosokawa, Chishio, Sodegaura-shi, JAPAN
Tomita, Seiji, Sodegaura-shi, JAPAN
Arakane, Takashi, Sodegaura-shi, JAPAN

PA Idemitsu Kosan Co., Ltd., Tokyo, JAPAN (non-U.S. corporation)

PI US 2005249976 A1 20051110

AI US 2005-150342 A1 20050613 (11)

RLI Continuation of Ser. No. US 2003-393988, filed on 24 Mar 2003, ABANDONED

PRAI JP 2002-81234 20020322

JP 2002-299810 20021015

DT Utility

FS APPLICATION

LREP OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C., 1940 DUKE STREET,
ALEXANDRIA, VA, 22314, US

CLMN Number of Claims: 18

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 1522

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A material for organic electroluminescence devices comprising a compound in which a heterocyclic group having nitrogen is bonded to an arylcarbazolyl group or a carbazolyalkylene group and an organic electroluminescence device comprising an anode, a cathode and an organic thin film layer comprising at least one layer and disposed between the anode and the cathode, wherein at least one layer in the organic thin film layer comprises the material for organic electroluminescence devices described above. The material can provide an organic electro-luminescence device emitting bluish light with a high purity of color. The organic electroluminescence device uses the material.

L5 ANSWER 5 OF 6 USPATFULL on STN

AN 2004:144367 USPATFULL <<LOGINID::20080529>>

TI Organic electroluminescent element and display

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Kita, Hiroshi, Tokyo, JAPAN

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PI US 2004110031 A1 20040610

US 7270893 B2 20070918

AI US 2003-718360 A1 20031120 (10)

PRAI JP 2002-342192 20021126

DT Utility

FS APPLICATION

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CLMN Number of Claims: 12

ECL Exemplary Claim: 1

DRWN 3 Drawing Page(s)

LN.CNT 1536

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Disclosed is an organic electroluminescent element comprising a component layer including a light emission layer, wherein the light emission layer contains a phosphorescent compound, and the component layer contains a compound represented by the following formula 1,

A_{paren open-st.(Z).sub.n} formula 1

wherein A represents a substituted or unsubstituted aromatic ring residue; n is a natural number of from 3 to 6; and Z represents a monovalent organic group represented by the following formula 2, provided that formula 1 does not have an n-fold axis of symmetry,

-L-Cz Formula 2

L5 ANSWER 6 OF 6 USPATFULL on STN

AN 2004:113906 USPATFULL <<LOGINID::20080529>>

TI Material for organic electroluminescence devices and organic electroluminescence device using the material

IN Iwakuma, Toshihiro, Chiba, JAPAN

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Arakane, Takashi, Chiba, JAPAN

PA Idemitsu Kosan Co., Ltd., Tokyo, JAPAN (non-U.S. corporation)

PI US 2004086745 A1 20040506

AI US 2003-393988 A1 20030324 (10)

PRAI JP 2002-81234 20020322

JP 2002-299810 20021015

DT Utility

FS APPLICATION

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CLMN Number of Claims: 18

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 1599

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A material for organic electroluminescence devices comprising a compound in which a heterocyclic group having nitrogen is bonded to an arylcarbazolyl group or a carbazolylalkylene group and an organic electroluminescence device comprising an anode, a cathode and an organic thin film layer comprising at least one layer and disposed between the anode and the cathode, wherein at least one layer in the organic thin film layer comprises the material for organic electroluminescence devices described above. The material can provide an organic electroluminescence device emitting bluish light with a high purity of color. The organic electroluminescence device uses the material.